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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/286,791	04/06/1999	SEIICHI OHTA	990216/LH	5436

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/02/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/286,791

Applicant(s)

OHTA, SEIICHI

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003 and 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/10/2003 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-12 filed on 8/28/2003 have been fully considered but they are not persuasive.

Applicant's arguments with respect newly added claims 13-14 filed on 8/28/2003 have been considered but are moot in view of the new ground(s) of rejection.

In re page 12, Applicant argues that Kurokawa does not disclose, teach or suggest storing image data corresponding to an electric signal subjected to the determination.

In response, the Applicant amended claim 1 with the limitation "a controller which controls the memory to store the image data corresponding to the electric signal used by the determining section for making the determination if a result of the determination of the

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determining section is “proper””. The Examiner considers that claim 1 as amended still being unpatentable over Kurokawa. Even though Kurokawa does not disclose storing the first picked-up image if a result of the determination is “proper”. However, Kurokawa discloses that at step S204, if no “dark”, it means the determination is “at or above a predetermined value”, the image signal is processed through step S206-S213, a main exposure is made at step S213 (figure 2, column 4, lines 1-60); and at the end main exposure (S221), the image data is written into the memory part 10 (figure 2, column 6, lines 13-25). It would have been obvious that the image signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

In re page 13, Applicant argues that Kurokawa does not disclose, teach or suggest storing image data corresponding to an electric signal subjected to the determination.

In response, the Applicant amended claim 10 with the limitation “storing image data corresponding to an electric signal subjected to determination of the brightness of the state of the picked up image, if a result of the determination is “at or above a predetermined valued””. The Examiner considers that claim 10 as amended still being unpatentable over Kurokawa. Even though Kurokawa does not disclose storing the first picked-up image if a result of the determination is “at or above a predetermined value”. However, Kurokawa discloses that at step S204, if no “dark”, it means the determination is “at or above a predetermined value”, the image signal is processed through step S206-S213, a main exposure is made at step S213 (figure 2, column 4, lines 1-60); and at the end main exposure (S221), the image data is written into the memory part 10 (figure 2, column 6, lines 13-25). It would have been obvious that the image

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signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-~~14~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa (US 6,426,775).

Regarding claim 1, Kurokawa discloses an image pickup device comprising an image pickup unit (solid-state image sensor 4, figure 1, column 3, lines 28-48); a memory (memory part 10, figure 1, column 3, lines 50-53); a determining section which makes a determination of whether or not the electric signal produced by the image pickup unit has a proper brightness (overall control and computing part 9 measuring light at step S203, then checking to find if it is dark at step S204, figure 2, column 4, lines 15-34), in a case where the image is picked up by the image pickup unit with light emitted from the light emitter (column 6, lines 47-59); a controller (overall control and computing part 9, figure 1) which controls the memory (memory part 10) to store the image data corresponding to the electric signal; a light emitter (emission part 15 and 16, figure 1) which is controlled by the controller to emit light in timing with an image pickup timing of the image pickup device (column 2, lines 25-35).

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Kurokawa does not disclose to store the image data corresponding to the electric signal used by the determining section for making the determination if a result of the determination of the determining section is “proper”. However, Kurokawa discloses that at step S204, if no “dark”, it means the determination is “proper”, the image signal is processed through step S206-S213, a main exposure is made at step S213 (figure 2, column 4, lines 1-60); and at the end main exposure (S221), the image data is written into the memory part 10 (figure 2, column 6, lines 13-25). It would have been obvious that the image signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

Regarding claims 2, 7, Kurokawa discloses when the result of the determination of the determining section is “not proper”, the controller obtains a light quantity of the light emitter which is assumed to be “proper” based on the electric signal produced by the image pickup unit, dispatches an image pickup instruction again to the image pickup unit, and at the same time, controls the light emitter to emit light in timing with the image pickup timing (at step S204, if it is “dark”, it means “not proper”, a flag is set and overall control part 9 causes the emission part 15 to be sufficiently charged at step S205, figures 1-2, column 4, lines 28-34).

Regarding claim 5, all the limitations are contained in claims 1-2. Therefore, see examiner’s comment regarding claims 1-2, except the limitation “a controller which computes an intensity of the light emitted from the stroboscopic light emitter” which is disclosed in Kurokawa (overall control and computing part 9 computes a light emission time, column 5, line 65 – column 6, line 12); and the limitation “the controller instructs the stroboscopic light emitter to

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emit light in synchronism with the image pickup operation of the image pickup unit” which is disclosed in Kurokawa (column 6, lines 5-12).

Regarding claim 6, all the limitations are contained in claim 1. Therefore, see examiner’s comment regarding claim 1, except the limitation “an auto-focusing unit for driving an optical system to focus on an object” which is disclosed in Kurokawa (automatic focusing lens, figure 1, column 4, lines 1-11).

Regarding claim 8, Kurokawa discloses the controller obtains a light emission quantity of the light emitter by referring to information of a distance to the object obtained by an auto-focusing operation of the auto-focussing unit (figure 2, column 3, line 65 – column 4, line 49).

Regarding claim 9, Kurokawa discloses the controller controls the light emitter to carry out a first light emission in a light emission quantity of the light emitter set by a user operation (release switch 14, figure 1, column 4, line 62 - column 5, line 10).

Regarding claim 10, Kurokawa discloses an image pickup method using a light emitter (emission parts 15, 16, figure 1) comprising the steps of carrying out a first light emission of a light emitter, carrying out a first image pickup in timing with the first light emission (step S216, first light emission, figures 1-2, column 4, line 62 – column 5, line 16); determining a brightness of a state an image picked up obtained by the first image pickup operation carried out in timing with the first light emission (step S217, measure light, figure 2, column 5, lines 48-64);

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determining a second light emission value of the light emitter if the result of the determination is “less than a predetermined value” (over all control and computing part 9 computes a light emission time for the second light emission, figure 2, column 5, line 48 – column 6, line 12); carrying out a second light emission of the light emitter based on the second light emission value, and carrying out a second image pickup in timing with the second light emission (over all control and computing part 9 computes a light emission time for the second light emission, figure 2, column 5, line 48 – column 6, line 12); storing the second picked-up image (after completion of the main exposure at the step S221, the image signal obtained by image sensor 4 is stored in memory part 10, figures 1-2, column 6, lines 13-25).

Kurokawa does not disclose storing image data corresponding to an electric signal subjected to determination of the brightness of the state of the picked up image, if a result of the determination is “at or above a predetermined value”. However, Kurokawa discloses that at step S204, if no “dark”, it means the determination is “at or above a predetermined value”, the image signal is processed through step S206-S213, a main exposure is made at step S213 (figure 2, column 4, lines 1-60); and at the end main exposure (S221), the image data is written into the memory part 10 (figure 2, column 6, lines 13-25). It would have been obvious that the image signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

Regarding claims 11 and 12, Kurokawa discloses a shutter button (shutter release switch 14, figure 1).

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Regarding claim 13, Kurokawa discloses an image pickup device comprising an image pickup unit (solid-state image sensor 4, figure 1, column 3, lines 28-48); a memory (memory part 10, figure 1, column 3, lines 50-53); a pre-emission instructing unit (make first light emission, figure 2, S216); a main emission instructing unit (make second light emission, figure 2, S220); a determining section which makes a determination of whether or not the electric signal produced by the image pickup unit has a proper brightness (overall control and computing part 9 measuring light at step S203, then checking to find if it is dark at step S204, figure 2, column 4, lines 15-34); means for controlling (overall control and computing part 9, figure 1) the memory (memory part 10) to store image data corresponding to an the electric signal; controlling the memory to store image data corresponding to an electric signal which is produced by the a second image pickup operation and conversion of the image pickup unit, if the result of the determination by the determining section is "not proper" (overall control and computing part 9 measuring light at step S203, then checking to find if it is dark ("not proper") at step S204, figure 2, column 4, lines 15-34); wherein the light emitter (emission part 15 and 16, figure 1) is controlled by one of the pre-emission instructing unit and the main emission instructing unit to emit light in timing with an image pickup timing with one of the first and second image pickup timings of the image pickup unit (column 2, lines 25-35).

Kurokawa does not disclose to store the image data corresponding to the electric signal subjected to determination by the determining section, if a result of the determination of the determining section is "proper". However, Kurokawa discloses that at step S204, if no "dark", it means the determination is "proper", the image signal is processed through step S206-S213, a main exposure is made at step S213 (figure 2, column 4, lines 1-60); and at the end main

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exposure (S221), the image data is written into the memory part 10 (figure 2, column 6, lines 13-25). It would have been obvious that the image signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

Regarding claim 14, Kurokawa disclose a proper light-quantity determining section (column4, lines 21-67).

5. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa (US 6,426,775) in view of Kitajima (JP 07-015655).

Regarding claim 3, Kurokawa fails to specifically disclose the controller prohibits storing in the memory of the electric signal produced by the image pickup unit when the result of the determination section is “not proper”. However, Kitajima discloses control part 15 prohibits a storing picture data in memory 113 (see constitution). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Kurokawa by the teaching of Kitajima in order to eliminate the need of power for writing and reading the unnecessary picture data (see constitution).

Regarding claim 4, Kurokawa and Kitajima fail to specifically disclose when an electric signal produced by the image pickup unit in timing with a first light emission of the light emitter is “not proper”, the controller controls the memory to store electric signals produced by the image pickup unit in timing with second and subsequent light emissions of the light emitter. However, Kurokawa discloses that at step S204, if no “dark”, it means the light emitter is not proper, the image signal is processed through step S206-S213, a main exposure is made at step

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S213. It would have been obvious that the image signal obtained by image sensor 4 at step S213 is stored in memory part 10 in order to save time in shooting picture.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong T Nguyen** whose telephone number is **(703) 308-9297**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber** can be reached on **(703) 305-4929**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or faxed to : (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (703) 306-0377.

LN LN
December 27, 2003



**ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**